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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,952	03/21/2006	Shuichi Inoue	SHO-0130	7541

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RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

MAYO III, WILLIAM H

ART UNIT PAPER NUMBER

2831

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/572,952

Applicant(s)

INOUE, SHUICHI

Examiner

William H. Mayo III

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>March 21, 2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in PCT National Application No. PCT/JP04/14165, filed on August 28, 2004.

Information Disclosure Statement

2. The information disclosure statement filed March 21, 2006 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
(1) if a machine or apparatus, its organization and operation;

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- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. The abstract of the disclosure is objected to because in lines 11-15, the abstract refers to purported merits of the invention which is improper content for the abstract.

The applicant should delete the sentences to provide the abstract with proper content.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campillo et al (Pat Num 4,255,853, herein referred to as Campillo) in view of Applicant's

Own Admission of Prior Art (herein referred to as AOAPA). Campillo discloses a flexible cable (Figs 1-4) for interconnecting the terminals of electrical assemblies (Col 1, lines 5-6). Specifically, Campillo discloses a cable (Figs 1-2) comprising connecting portions (2a & 2b) to which external terminals (Ai & Bi) are connected and which are provided on both ends (F1 & F2, respectively) and an intermediate portion (2c) connecting the connecting portions (2a & 2b) to each other, wherein the cable (Fig 3) comprises a plurality of sheets (2) of non electroconductivity (i.e. insulating support; Fig 3 discloses that there are four-layer cable connected to the four layers of terminals (not numbered) of the four stacked connectors (28, Col 5, lines 35-44), wherein each sheet (2) has a pair of wide ends (2a & 2b) and a narrow intermediate portion (2c) provided between the ends (2a & 2b), with m rows of rectangular regions (rows of terminals Ai & Bi)) having electroconductivity (conductor traces 6a & 6b) being arranged on each of the pairs of wide ends (2a & 2b) and k patterns (wherein k is a number equal to m because there is a conductor trace 6 for every terminal (Ai & Bi) of transmission paths (6) connecting the rectangular elastomer regions (Fig 2) being formed at the narrow intermediate portion (at 2c) and wherein n layers (n=4 since there is a four layer cable connected to the four layers of terminals (not numbered) of the four stacked connectors (28, Col 5, lines 35-44, which is less than m rows) of plurality of elastomeric sheets (2) being layered such that the elastomeric regions are in contact and connected with the external terminals (12a & 12b as shown in Fig 2b) by pressuring the external connecting terminals (12a & 12b) against both ends of the elastomer sheets (2) which are layered (Col 4, lines 25-36). With respect to claim 2, Campillo discloses that the cable (Fig 1) is

capable of being flexible bented (Col 3, lines 24-28). With respect to claim 3, Campillo discloses a method of making a cable (Figs 1-3) comprising an electroconductive portion (where the traces 6 are present) formation step of providing a non-electroconductive member (2) formed in the shape of a cable (Fig 1) so as to obtain a member (Col 3, lines 24-28), a cutting step for cutting the member (2) into sheets to obtain sheets (four layers of 2), a transmission path formation step for forming transmission paths (6) on the surface of the sheets (2, Col 3, lines 41-50) and a sheet (2) layering step for layering and adhering the plurality of sheets (Col 5, lines 21-26).

However, Campillo doesn't specifically disclose the sheets being made of an elastomeric material (claims 1-3).

AOAPA teaches that anisotropic electroconductive elastomer sheets ensuring electroconductivity only in a particular direction are well known in the art of connection cables and are commonly utilized for the connection between electronic parts and printed wiring boards because of there reduction in size and thickness (Pages 1-2). Specifically, with respect to claims 1-3, AOAPA teaches elastomeric sheets are commonly utilized with flexible printed circuit boards is known (Page 2, paragraph 5).

With respect to claims 1-3, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the cable of Campillo to comprise the sheets being made of an elastomeric material configuration as taught by AOAPA because AOAPA teaches that such a configuration is well known in the art of connection cables and are commonly utilized for the connection between electronic parts and printed wiring boards because of there reduction in size and

thickness and flexibility (Page 2, paragraph 5) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Conclusion


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Yokokawa (Pat Num 6,344,616), Fritz et al (Pat Num 4,149,026), Erdle (Pat Num 3,459,880), Gordon (Pat Num 3,547,718), Murphy et al (Pat Num 5,274,195), Tahara et al (Pat Num 5,541,369), Himeno et al (Pat Num 5,134,252), Sexton (Pat Num 6,492,595), Crandall (Pat Num 4,808,773), Basile (Pat Num 3,296,365), Ohara et al (Pat Num 6,723,925), Kanayama et al (Pat Num 7,098,139), Gerpheide (Pat Num 3,459,879), Latimer (Pat Num 3,244,795), Shirato et al (Pat Num 6,774,971), Shiba et al (Pat Num 4,243,455), Fujita et al (Pat Num 4,113,981), Horton et al (Pat Num 5,186,632), Look (Pat Num 4,578,529), Dery et al (Pat Num 4,642,421), Fritz et al (Pat Num 4,149,026), Jordan (Pat Num 2004/0211585), Stopper (Pat Num 4,845,315), Argyrakis et al (Pat Num 5,373,109), Bousman (Pat Num 5,083,238), Balde (Pat Num 3,878,341), Luetzow (Pat Num 3,818,122), Thomas (Pat Num 3,612,744), Tanaka et al (Pat Num 6,469,252), Luetzow (Pat Num 4,616,717), Austin (Pat Num 3,805,213), and Henschen et al (Pat Num 3,703,604), all of which disclose flexible flat cables .

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
November 12, 2006